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learned in the deployment process, where both foreign flag and US flag sealift, were used. This paper will explore ways to minimize the risks associated with utilizing foreign flagged ships for sealift as well as providing for some strategies that will also enhance the sealift fleet.

15. SUBJECT TERMS Sealift, Foreign Flag Sealift, Strategic Mobility, Merchant Marine, American flag shipping, Operation Iraqi Freedom, Operation Desert Shield, Desert Storm 16. SECURITY CLASSIFICATION OF: 17. LIMITATION 18. NUMBER 19a. NAME OF RESPONSIBLE PERSON OF ABSTRACT **OF PAGES** Chairman, JMO Dept 19b. TELEPHONE NUMBER (include area a. REPORT b. ABSTRACT c. THIS PAGE UNCLASSIFIED UNCLASSIFIED UNCLASSIFIED 401-841-3556

NAVAL WAR COLLEGE Newport, RI

Foreign Flag Sealift: A Risky Business for the Combatant Commander?

By

Greg S. Thornton GS-13 US Department of Transportation Maritime Administration

A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College, the Department of the Navy or the Maritime Administration.

Signature:	
14 February 2005	
	Faculty Advisor LCOL Bryan Newkirk USA

ABSTRACT

It is important for the Combatant Commander of US Joint Forces to be able to project combat power wherever it is needed around the globe. Sealift, both from foreign flagged and American flagged merchant ships, plays a key role in meeting this power projection requirement. The purpose of this paper is to prove that foreign flagged sealift presents significant risks to the Combatant Commanders' deployment mission during hostilities; however, these risks can be mitigated if the strategic lift assets are prudently managed during the deployment process. Operations' Desert Shield and Desert Storm as well as Operation Iraqi Freedom provide valuable lessons learned in the deployment process, where both foreign flag and US flag sealift, were used. This paper will explore ways to minimize the risks associated with utilizing foreign flagged ships for sealift as well as providing for some strategies that will also enhance the sealift fleet.

INTRODUCTION

"There is not much that is new to any trained logistician in the statements of lessons learned that I have included. There seems to me, however, to be a good deal in them that has been forgotten or disregarded in the years since World War II when the accent has been on economy and efficiency in peacetime operations as distinguished from preparations for effective operations in war."

General Carter B Magruder, US Army Retired (expert in logistics)

The purpose of this paper is to prove that the rise of the foreign flagged fleet, and the decline of the American flagged merchant fleet as a source of sealift, will present some significant risks to the Combatant Commanders' mission during hostilities, however, these risks can be mitigated if the strategic lift assets are prudently managed during the deployment process. It is important for the Combatant Commander of US Joint Forces to be able to project combat power wherever it is needed around the globe. Sealift, from both foreign flagged and American flagged merchant ships, plays a key role in meeting this power projection requirement. It is important to note, that a very large part of the success of the Allied forces in WW II, was due to the ability of the American flagged merchant ships to supply the American Forces with the military cargo (planes, tanks, jeeps, trucks, food, fuel and ammunition, etc...) to the forces in Europe and in the Pacific. They also carried a significant amount of supplies that were sent by the U.S. to keep the Allied military and civilian populations "in the fight" against the Axis powers. The available pool of American Flag Merchant ships, which can be used for Sealift, has declined steadily since the WWII era high of 4,442 ships (3,778 were government owned) in 1946, to a low of 416 ships today

¹ Carter B Magruder. General, U.S. Army Retired, <u>Recurring Logistics Problems As I Have Observed Them</u>, (Washington, D.C: Center of Military History, United States Army 1991), 119

(179 are government owned).² This decline in the number of ships has been spurred on by improvements in operational efficiency within the shipping industry. Today, merchant ships are much larger, faster, more specialized, have a higher cargo carrying capacity, and operate more efficiently than the ships of 50 years ago. The globalization of the supply chain, with stiff economic competition in the ship building and operating market, from foreign flagged shipping companies, has also significantly reduced the number of American Flagged Merchant ships available for Sealift. The number of American flagged merchant ships declined even further after Operation Desert Shield and Desert Storm where there were 621 ships in 1991. During that operation, there was a massive buildup of US forces in the Persian Gulf, which necessitated using massive amounts of Airlift and Sealift in order to deploy US and coalition forces and their equipment from the US to Kuwait and Saudi Arabia.

"By the end of the war 459 shiploads had moved 945,000 pieces of unit equipment totaling nearly 32.7 million square feet...in all the command (Military Sealift Command) transported about 9.2 million tons of cargo by sea (3.1 dry and 6.1 petroleum products)... 196 ship loads/10.07 million square feet were on foreign flagged ships." ³

With the increase of globalization, traditional American flag shipping companies like American President Lines (APL) and Sealand are now owned by foreign companies. This presents a risk to the Combatant Commander, in that foreign ownership of the ships that are

² "U.S.-Flag Merchant Fleet Calendar Years 2003 through 1946 Oceangoing Self-Propelled Vessels of 1,000 Gross Tons." Lkd. <u>US DOT Maritime Administration website</u> October 2003. http://www.marad.dot.gov/MARAD_statistics/US-FLAG-HISTORY.pdf, [1/16/2005].

³ Cora J Holt, and James K Mathews, <u>So Many, So Much, So Far, So Fast: United States Transportation Command and Strategic Deployment for Operation Desert Shield/Desert Storm</u>, (Washington, DC: Joint History Office, Office of the Chairman of the Joint Chiefs of Staff and Research Center, United States Transportation Command, 1996), 115-116.

utilized to move the equipment may delay or disrupt the movement of cargo into theater. This paper will analyze those risks that are associated with shipping equipment on foreign flagged ships and the implications of those risks. The Combatant Commander may not necessarily care who owns the ship. He may not care about what the nationalities of the master, crew of the ship, or what flag the ship is flying. He will care if the ships do not arrive in theater on time, in order to offload the military cargo and unit equipment to perform his mission. This paper will address factors associated with sealift, the use of foreign flagged vessels, and present some strategies that may be employed to mitigate those risks.

There are many risks associated with the use of foreign flagged ships. Some of these include the command and control of the ships, force protection of the ship and its cargo, prevention of attack by the enemy or sabotage by the crew and delays to the ships for political or personal reasons etc... These risks may seem trivial in war time, however if they cause the required cargo for the forces in theater not to arrive on time then the Combatant Commander may not be able to perform his mission. The Combatant Commander and the strategic deployment manager, the United States Transportation Command, must mitigate these risks during the deployment planning process.

THE COMPOSITION OF THE STRATEGIC SEALIFT FORCE AFTER DESERT STORM

The heavy reliance on foreign flagged sealift was evident during Operation Desert Shield and Desert Storm in that 26.6% of all of the unit cargo was transported on foreign flagged ships, which included 41 Roll on/Roll off (RO/RO) ships.⁴ In an effort to ensure that there was adequate strategic Sealift capability following Operation Desert Shield/Desert Storm. The United States Transportation Command (USTRANSCOM) conducted a Mobility Requirements Study (MRS)⁵ and a Mobility Requirements Study Bottom Up Review Update (MRS BURU) ⁶ to look at the amount of surge sealift required to move troops and their equipment into a theater. As a result of the MRS, MRS BURU, and lessons learned from the Desert Shield and Desert Storm, an effort was launched to build and procure additional Roll on /Roll Off (RO/RO) ships. Most notably, there was an effort to build new ships and convert container ships into a class of ships known as Large Medium Speed Roll on Roll off ships (LMSRS). Additionally 12 foreign flagged Roll/Roll Off (RO/RO) ships, were bought, re-flagged and converted for military useful purposes for the US Department of Transportation Maritime Administration (MARAD) Ready Reserve Force (RRF) fleet as American flagged ships. ⁷ The size requirement for the surge sealift fleet was predicated on the MRS BURU requirement for approximately 10 million square feet of surge RO/RO capacity⁸. This was planning for the national military strategy of fighting two nearly

⁴ Ibid., 125.

⁵ "Moving U.S. Forces: Options for Strategic Mobility" <u>The Congress of the United States Congressional Budget Office</u> February 1997. http://www.fas.org/man/congress/1997/cbo_mobility/chap_03.htm [2 February 2005].

⁶ Ibid.

⁷ United States General Accounting Office, January 7, 1994 letter to "A. J. Herberger Administrator U.S. Maritime Administration, Ship Acquisitions for the RRF" <u>United States General Accounting Office website</u>, 7 January 1994 http://161.203.16.4/t2pbat4/150586.pdf [2/13/2005].

⁸ "Moving U.S. Forces: Options for Strategic Mobility" <u>The Congress of the United States Congressional Budget Office</u> February 1997. http://www.fas.org/man/congress/1997/cbo_mobility/chap_03.htm [2 February 2005].

simultaneous Major Regional Contingencies (MRC's).⁹ The Maritime Pre-positioning Squadrons (MPSRONS), and Army Afloat Pre-positioning Squadrons (APSRONS), which include 19 Large Medium Speed Roll on Roll Off ships (LMSRS), and a good portion of the MARAD Ready Reserve Fleet (RRF) were involved in Sealift for Operation Iraqi Freedom (OIF) from late in October of 2002 until May of 2003 (the bulk of the sealift effort occurred in January of 03). The sealift effort for OIF also included 57 chartered ships, of which 17 were foreign flagged, ¹⁰ which indicates that the U.S. government is not totally self sufficient in providing for strategic sealift for just one MRC. The Voluntary Inter-modal Sealift Agreement (VISA) was not utilized to supply American flagged merchant ships during the initial deployment phase. ¹¹ At the height of the sealift effort in support of Operation Iraqi Freedom, the Sealift force reached its maximum since Desert Shield/ Desert Storm.

"On 24 March 2003, when the "Steel Bridge Of Democracy" was at its peak, it included one hundred sixty-seven of the two hundred fourteen active (Military Sealift Command) MSC ships.

STEEL BRIDGE OF DEMOCRACY: 24 MARCH 2003

- 25 Naval Fleet Auxiliary Force (NFAF) Ships*
- **3 Special Mission Ships**
- 33 Cargo-Carrying Prepositioning Ships
- 49 Surge Sealift Ships
- 57 Chartered Ships, 12

⁹ Ibid.

¹⁰Beverly McClinton, <<u>beverly.mcclinton@navy.mil</u>> "RE: sealift in support of OIF I, OIF II and OIF II.5 OIF SEALIFT, Spreadsheet Oct 1 2002 to May 1 2003" [E-mail to Greg Thornton <greg.thornton@nwc.navy.mil>]1/18/05.

¹¹ Military Sealift Command, "MSC OIF1 Monograph," (unpublished Working Draft, Lessons Learned from Operation Iraqi Freedom, 2004), 11.

^{*} MSC NFAF and Special mission ships provide services such as Underway replenishment (UNREP) to ships. This includes delivering of food, fuel and ammunition, as well as providing the hospital ships and ships that conduct hydrographic surveys in support of the active US Navy and coalition fleets. They do not carry Army and Marine combat equipment and sustainment supplies in vast quantities like the point to point surge sealift and pre-positioning ships.

Given the US recent reliance on the foreign flag ships during Desert Shield/ Desert Storm and OIF, and the declining American Flag merchant fleet, an increasing number of foreign flagged ships will be chartered to meet future U.S. military cargo movement requirements during one or more major crisis.

Shipping the military cargo/equipment on foreign flagged ships introduces an element of risk for the Combatant Commander. The risks associated with using a non US ship, with a non U.S. ship owner, non U.S. ship operator, a non U.S. ship master, and non U.S. crew is that any or all may those above may not have the same interests and priorities as the U.S. military. Foreign flagged ships and operators are subject to the will of their respective governments as well as their own personal and or political beliefs and their perceptions about the safety of the ship, while it is carrying cargo for the U.S. military. The risks are that, for a myriad of reasons; from the personal beliefs of the ships crew all the way up to the political views of the government of the nation states where they (the ship owners, Ship operators and ships crews) are from. The depth of these views will vary depending upon the region; the particulars of the crisis, and the nation states of the owners, operators and crews. Any, and or, all of the above, may prevent the ship from being able to deliver its cargo on time, to the Combatant Commander. The use of foreign flag shipping introduces risks that the strategic deployment team of the Combatant Commander, and USTRANSCOM, must have plans in place to mitigate those risks.

¹²Military Sealift Command, "MSC OIF1 Monograph", (unpublished Working Draft, Lessons Learned from Operation Iraqi Freedom, 2004) 100.

THE DECLINE OF AMERICAN FLAG SHIPPING AND THE RISE OF FOREIGN FLAG SHIPPING INDUSTRY, AND ITS' EFFECT ON THE COMBATANT COMMANDER'S ABILITY TO DEPLOY FORCES

If there is a shortfall in available lift for the Combatant Commander at the time that he needs to deploy his forces, he will have to go outside on the open market to charter additional foreign flagged sealift capability. While the American merchant marine has declined in recent years, foreign flagged shipping companies have been dominating the world shipping market. An understanding of the evolution of the American flagged shipping industry helps one to understand the U.S. declining reliance on the ships of the American flagged merchant marine. Several Cabotage laws were designed to keep the American flagged shipping industry afloat as well as minimize the use of foreign flagged ships by the military. The Military Cargo Preference Act Of 1904 provided that US military supplies must be transported on a U.S. flagged ship unless that requirement is waived by the Secretary of Defense.¹³ The Jones Act and the Merchant Marine Act of 1936, attempted to provide for a well balanced merchant marine that in times of crisis that can be used as an auxiliary to the US Navy. 14 The problem with these laws is that, they have not kept up with the global market place. In the past 20 years, the globalization of the world economy has pushed the manufacturing industries, as well as, the ship building and ship operating industry, away from the U.S. to countries where the costs are lower.

¹³ US Department of Transportation Maritime Administration <u>Compilation of Maritime Laws</u> (Washington, DC: 2004), 219.

¹⁴ Ibid., 1.

The world and US flagged merchant fleets have been modernized, from the predominantly break bulk fleets of the WWII era. Back then, the US Flagged Merchant fleet was made up of surplus Liberty and Victory ships that were small, slow, break bulk ships that utilized masts and booms to load and unload cargo which was labor intensive and time consuming. They were built by the government to carry wartime cargo to the war-fighters. At the end of WWII the US flag merchant fleet was comprised of 4,442 ships (1946) with a total deadweight capacity of 46,450,000 deadweight tons (the ships cargo carrying capacity measured in tons). In contrast, today's modern US merchant fleet consists of 416 ships (2003) made up of 110 tankers, 87 container ships, 64 Roll on/Roll off (RO/RO) ships (32 are US government owned), and 155 other vessels with a total deadweight tonnage capacity of 13,294,000 deadweight tons. These "other vessels" are not militarily useful as they are a mixture of break bulk, barge carriers, and other specialized cargo ships. 15

The overall reduction in US Flag tonnage from WWII by a factor of four, and the reduction in the number of ships by a factor of 10, only tells part of the story. The advent of the standardized shipping container in the 1960's, revolutionized the merchant shipping industry. Ideally, with less US Flag merchant ships, those that remain in service would be larger and would still be militarily useful. That would be logical, based on the numbers, but it would not be completely true. The preponderance of military equipment (vehicles) used by the Joint forces of the US, is not made to be put inside of a standard 40 foot shipping container (40ft long x 8ft wide x 8.5 ft high). The majority of military equipment in the US

¹⁵ "U.S.-Flag Merchant Fleet Calendar Years 2003 through 1946 Oceangoing Self-Propelled Vessels of 1,000 Gross Tons." Lkd. <u>US DOT Maritime Administration website at</u> 1 October 2003. http://www.marad.dot.gov/MARAD_statistics/US-FLAG-HISTORY.pdf, [1/16/2005].

inventory is easily transported, on a Roll on/Roll off (RO/RO) ship, where it can be loaded, and unloaded pier side, without the assistance of a container crane. Unfortunately, even a light force consisting of a Stryker brigade, with its center piece, the Stryker combat vehicle, has a fully loaded Gross Vehicle Weight (GVW) of 19 tons. 16 This is still too large and heavy to fit on most commercial car carrying Roll on/Roll off (RO/RO) ships. Most commercial car carrying RO/RO ships are built to carry automobiles and light trucks, from the factories where the vehicles are built, to the places where they are sold. That means that they do not have the sufficient overhead vehicle space, and the deck strengths to carry the Army and, Marine heavy equipment, most notably, the M1A2 Abrams battle tank, with a Gross Vehicle Weight (GVW) of 70 tons. ¹⁷ There are some RO/RO ferry vessels that have the overhead space and deck strength, to carry the heavy equipment but, they are not built for long open ocean transits. From the above illustration it is easy to see, that there is limited available shipping from the commercial US Merchant Marine that can be used by the Combatant Commander, to deploy his heavy forces, in times of crisis. Additionally there are very few American Flagged Roll on/Roll off (RO/RO) ships available to be chartered as the American flagged RO/RO fleet is very small. Of the 32 American flagged (non Government owned) RO/RO ships only 10 of them are over 10,000 gross tons. Thus, if there is a shortfall in available Roll on /Roll off (RO/RO) ships, which are the primary merchant ships used to deploy cargo for the Combatant Commander, then the USTRANSCOM will have to go outside on the open market to charter additional foreign flagged sealift capability.

¹⁶ "Medium Armored Vehicle (MAV)" <u>Global Security.Org Website</u> 29 December 2003 http://www.globalsecurity.org/military/systems/ground/mav.htm [16 January 2005].

^{17 &}quot;M1 Abrams Main Battle Tank <u>Global Security. Org Website</u> 29 March 2004 http://www.globalsecurity.org/military/systems/ground/m1-specs.htm [16 January 2005].

GOVERNMENT PROGRAMS TO PROVIDE COMMERCIAL SURGE SEALIFT CAPACITY TO THE COMBATANT COMMANDER

There are programs in place that are designed to help keep the US Merchant Marine afloat economically and at the same time provide additional surge sealift capacity to the Combatant Commander. There are two government programs that deal with providing additional sealift capacity the first is the Voluntary Inter-modal Sealift Agreement (VISA) and the second is the Maritime Security Program (MSP). Both of these programs work together and are similar in form and function to what Air Mobility Command does with the civilian airline industry and the Civil Reserve Air Fleet (CRAF) program. Commercial airlines are contracted by the Department of Defense (DOD) to operate a number of planes that are to be available to carry passengers and cargo in times of crisis. The aircraft are activated for Military service in stages depending upon Department of Defense (DOD) requirements, to move people and equipment. 18 VISA& MSP and CRAF work in essentially the same ways, they are implemented in stages where Stage I, is the lowest amount of requisitioned, whereas Stage III is where the highest lift capacity is requisitioned. "More than 75% of U.S.-flag commercial shipping capacity is enrolled in VISA Stage III...10 million sq. ft. of military useful capacity is available...In this manner, the Government...gains "assured access" to a global commercial transportation network for use in national emergencies."19

¹⁸ "Civilian Reserve Air Fleet Fact Sheet" <u>US Air Force Website Air Force link.</u> July 2004 http://www.af.mil/factsheets/factsheet.asp?fsID=173. [2 February 2005].

It is easy to see that there is definitely an effort to bolster the US Flag Merchant Marine but what is not spoken about is the move towards containerization of military cargo. With programs like VISA and MSP, if container shipping companies like American President Lines (APL) are involved in VISA stage III, 50% of the capacity of APL ships would become available to United States Transportation Command (USTRANSCOM). APL is a foreign owned company that would theoretically give the US government access to 50% of their container fleet capacity, and infrastructure (the use of: the ports, terminals, railheads and rail lines etc...). Under VISA stage III, if APL decides to utilize a foreign flagged container ship there is a risk to the delivery of the cargo. However, not all of the cargo that is required to support a unit is needed in the theater for the first 30 days. The container with sustainment cargo maybe loaded onto a regular line haul container ship (also known as liner service) that is not 100% dedicated to carrying cargo to the Combatant Commander and its path into the theater may not be the most expeditious. The ship may not go directly to the theater port of debarkation and or the container may travel on several different ships to get there.^{\$} The Combatant Commander along with TRANSCOM must ensure that the unit and all of its equipment needed for the early of the days of the combatant commanders, war-fight arrive as soon as possible. This is extremely important to the Combatant Commander, in that if the equipment and their supplies don't arrive in theater in accordance with his warfighting timelines then he may not be able to accomplish his mission. If the high priority

¹⁹ "VISA Brochure" Lkd. <u>US DOT Maritime Administration Website</u>, August 2002. http://marad.dot.gov/programs/MSP/VISA/visa%20brochure.pdf, . [18 January 2005].

^{\$} Container shipping lines often have smaller ships that act as feeder ships and call at the smaller ports to collect and consolidate container cargo and collect and discharge cargo at the major ports. The larger ships that are on a longer runs, i.e. going around the world or Pacific Rim, stop at the major ports to collect and discharge cargo from and to the feeder ships.

equipment and sustainment supply does not arrive in time then the Combatant Commander runs the risk of culminating prior to achieving the Operational objective. Therefore the flow of equipment into the theater must be programmed to go on either MSC or MARAD assets, VISA assets and foreign flagged shipping assets.

In order to minimize the risk introduced by the utilization of foreign flagged ships, there are a number of things that the Combatant Commander can do. The sealift portion of the strategic mobility triad should be regularly exercised during peacetime. A good test of the system during peace time could be conducted by sending military cargo on VISA/ MSP ships as well as those foreign flagged ships that would likely be used for deployment of forces. USTRANSCOM can also preposition more high priority items in theater ahead of time, based on the risk analysis associated with using the different types of shipping.

FREEDOM FOREIGN FLAG SHIPPING IN SUPPORT OF OPERATION IRAQI

The real life scenario below will illustrate the risks that the Combatant Commanders might experience when using foreign flag ships to deploy of forces into a theater. During the initial build up phase for Operation Iraqi Freedom, two Cypriot flagged ships, which were owned by a consortium of companies based in the Netherlands, were chartered by Military Sealift Command to carry Patriot Missiles and rolling stock (military equipment) to Turkey. As the ships were registered under the flag of the Island of Cypress, they were not allowed into Turkey, due to a diplomatic dispute between Greece and Turkey, over the Island of Cypress. To further complicate matters, the ships were sent to Greece to transship the US Army cargo onto another foreign flagged ship so that the cargo could be offloaded in Turkey.

Unfortunately the port that they chose to do the transshipment was a hotbed of anti war protests and that the mayor of the town threatened to stop the transshipment of the second ship if the protestors got out of hand. Ultimately a significant diplomatic effort was required to get the ships re-flagged so that they could offload their cargo in Turkey.

Against this backdrop, there was equipment from the 4th Infantry Division (4th ID) that was also supposed to offload its' cargo in Turkey. The 4th IDs cargo was loaded onto 35 American flagged ships, RFF and MSC sealift ships, and 15 foreign flagged ships that were all steaming around the Eastern Mediterranean in a congested sea area with limited maneuvering room. The foreign flagged ships presented a command and control challenge in that all of the sailing orders had to be communicated to the ships via non-secure means (email and voice communications). The sealift ships both MSC and RRF ships have secure means for sending and receiving classified sailing and positional information to the Operational Commanders. It is unclear from the unclassified lessons learned how this type of information was sent and received from the foreign flagged ships. Eventually the decision was made by the Combatant Commander, to bring the ships with all of the 4th Infantry Division equipment, as well as the equipment from those two ships, through the choke points in the Suez Canal, The Red Sea and the Persian Gulf past the Straits of Hormuz and on into Kuwait.²⁰

As the case above clearly shows, there are risks to the Combatant Commanders' mission associated with the use of foreign flagged ships that the Combatant Commander and TRANSCOM must deal with. Had TRANSCOM and MSC done better planning, and had more local knowledge of the deep seeded animosity between Greece and Turkey, the risk

²⁰ Military Sealift Command, "MSC OIF1 Monograph," (unpublished Working Draft, Lessons Learned from Operation Iraqi Freedom, 2004), 105.

reduction might have occurred by utilizing a different flagged ship. Nonetheless, it should be noted that these were not insurmountable problems, but it does help one to consider possible risks associated with foreign flagged shipping solutions to reduce those risks during deployment planning. Perhaps Clausewitz said it best "Every thing in war is very simple, but the simplest thing is difficult."²¹

An additional strategy to minimize the types of risks of utilizing foreign flagged ships in this instance would be to ensure that the vessel must be able to get diplomatic clearance to enter both the Ports of Embarkation (POE) and the Ports of Debarkation (POD). This can easily be included as part of the charter agreement for the ship. When using foreign flagged ships another strategy that the TRANSCOM commander may employ is the act of reflagging the ship. According to the MSC Monograph it was not out of the ordinary for ships that were being sent to Turkey during Operation Iraqi Freedom to be re-flagged to get diplomatic clearance for the ship to enter the country.²² Another risk reducer would be for foreign flagged ships to be re-flagged to fly the US flag permanently. In order to implement this risk reducer, it can require extensive modifications to the ships structure in order to comply with the applicable US Coast Guard and American Bureau of Shipping Regulations for all US flagged merchant vessels.

OIF LESSONS LEARNED OPERATIONAL RISK MANAGEMENT FOR THE COMBATANT COMMANDER

²¹ Carl von Clausewitz, .On War. Michael Howard and Peter Paret eds. and trans. Princeton: Princeton University Press, 1989. 119.

²² Military Sealift Command, "MSC OIF1 Monograph," (unpublished Working Draft, Lessons Learned from Operation Iraqi Freedom, 2004), 105.

There are a myriad of risks that the Combatant Commander must mitigate when sending equipment on foreign flagged ships. Prior to the deployment of heavy forces needed for Operation Iraqi Freedom, the Commander of Military Sealift Command, VADM Brewer, initiated a war game (SEALIFT 02) at the Naval War College. The purpose of the war game was to refine plans, define and protect critical vulnerabilities against attacks, provide courses of action and alternative courses of action, and also educate the war-fighter in the deployment process. The war game gave all of the major players in the force deployment arena, The United States Transportation Command (USTRANSCOM), Military Sealift Command (MSC), the Maritime Administration (MARAD), Military Traffic Management Command (MTMC) now known as Surface Distribution and Deployment Command (SDDC), the Combatant Commanders (USCENTCOM), and the Joint Force Commanders (JFCOM) the opportunity to exercise the deployment of the forces and their equipment to the US Central Command (USCENTCOM) Area of Responsibility (AOR). Through the war gaming process they noted that there were several critical vulnerabilities with the regular Military Sealift Command assets as well as the Surge Sealift assets and the foreign flagged charter ships. All of the Surge Sealift ships had limited Force Protection and Chemical Biological Radiological Decontamination (CBR-D) capabilities; whereas the foreign flagged chartered ships did not have any force protection or CBR-D capabilities. They noted that they would need additional Force Protection Assets for the ships as well as CBR-D gear for all of the ships. They noted that the vessels would be transiting choke points and that assets would be needed to provide escort services. Additionally they noted that the ships crew lists, and those that had access to the ships, needed to be vetted as there was a potential for infiltration of the ships crews by terrorist organizations for both the Surge Sealift and the

foreign flag ships.²³ For the Maritime Administration's (MARAD) Ready Reserve Force (RRF) ships and the Military Sealift Command Sealift ships they noted that they needed to provide a secure way to provide Command and Control of the ships and provide a secure means for transmitting messages to and from the ships. Sailing orders, ships movement and position information reports along with daily situation reports for the Military Sealift Command ships, from both the MSC fleet and the RRF fleet, is classified while the ships are under MSC operational control.

During the exercise the Combatant Commander did an excellent job of risk management in his plans to deal with the vulnerabilities of the MSC and RRF ships, however the risks associated with foreign flagged ships were much more complex.

"(Force Protection) Risks: Due to the limitations of FP assets in place at the various SPOE (Sealift Port of Embarkation) and SPOD (Sealift Port of Debarkation), at choke points, and while en route, certain risks had to be accepted. The decision to have security forces embarked aboard every vessel would require up to one thousand five hundred personnel. The escort of MSC (Military Sealift Command) vessels would also have to be modified in the near term and would entail continued discussions with Combatant and Naval Fleet Commanders.Liner Service Utilization for Moving Strategic Lift. Although Military Traffic Management Command (MTMC) continued to work this issue, there was not full in-transit visibility (ITV) for the liners or the cargo they carried. There were also weak links in the FP (Force Protection) of liners while transshipping and in the crew vetting process." *24

²³ Military Sealift Command, "MSC OIF1 Monograph," (unpublished Working Draft, Lessons Learned from Operation Iraqi Freedom, 2004), 1-5.

^{*}Liner service is the regular shipping that USTRANSCOM provides to the US military to move cargo from place to place. The shipping companies that they contract with to move the cargo, may utilize US flag or foreign flagged vessels to transport the cargo dependant upon the availability of US flagged ships available at a reasonable price. Depending upon where the Port of Embarkation and the Port of Debarkation there may not be a US flagged ship, or a US company that operates ships between those two ports.

²⁴ Military Sealift Command, "MSC OIF1 Monograph," (unpublished Working Draft, Lessons Learned from Operation Iraqi Freedom, 2004), 11.

The ships providing sealift were augmented with either a US Marine Corps Fleet

Antiterrorism Security Team (USMC FAST) or Guardian Mariners Force Protection teams
from the Puerto Rican National Guard.** These were typically manned by a 12-15 person
team outfitted with various types of weapons (machine guns, grenade launchers, and M-16
rifles).²⁵ While on the ships they are also known as Embarked Security Teams (EST). The
composition of the teams today is made up from the Navy enlisted personnel and they are
totally self sufficient and they have secure communications capability that is deployable with
the team. Now these teams do not embark and disembark at the ports of embarkation or
debarkation but they embark the ship prior to going into a choke point and depart when
through the choke point. ²⁶ Perhaps, this Embarked Security Team (EST) also provides a
critical command and control element, for the ship while they are embarked, which provides
a relatively easy way to maintain operational security and deny access to critical classified
information to the crews of the foreign flagged ships.

There was a crew vetting process initiated to vet the names of the crew members aboard the ships; both U.S. and foreign flag charter ships, and vet them through the El Paso Intelligence Center (EPIC) Maritime Unit. The crew names were screened against various

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^{**} It is important to note that the embarkation of Uniformed Military security teams on civilian commercial merchant ships (US or foreign flagged) has not been done as a matter of course to protect US military cargo since the Naval Armed Guards were embarked on merchant ships during WWII.

²⁵ Ibid., 42.

²⁶ LT Howerton, USNR, CDR McDermott, USNR "Military Sealift Command Force Protection" brief to Merchant Marine Reserve, US Naval Reserve conference, New Orleans LA: Jan 21, 2005.

national and international databases and removed from the ships if there was verifiable information of a derogatory nature."²⁷

The Chemical, Biological, Radiological and Decontamination (CBR-D) threat was mitigated by issuing the appropriate Mission Oriented Protective Posture (MOPP) gear and providing CBR-D training to the ships crews.

"All MSC ships, whether organic to specific MSC programs, RRF surge sealift assets, or short-term time chartered vessels (both U.S. and foreign flagged), had to be outfitted with CBR-D equipment prior to pulling into a USCENTCOM SPOD. Additionally, the crews were required to have received CBR-D training and be outfitted with protective gear. These measures were critical given all the CBR alerts issued to ships in Kuwait." ²⁸

NATO naval ships in the vicinity of the various choke points provided escort services. It is not clear from the lessons learned how operational security was maintained or what the classification level of the communications between the escort ships and the foreign flagged sealift ships transiting the choke points.²⁹

On the topic of transiting into war zone, one risk that is quite popular among strong advocates of a well balanced American flagged merchant marine is that the foreign flag ships masters will balk at taking their ships into a war zone. Although there were some instances during Operation Desert Shield and Desert storm where foreign flagged ships refused to enter a war zone there were no instances of this occurring in the lessons learned from Operation Iraqi Freedom. In contrast, during Operation Desert Shield and Desert Storm "for a variety of reasons—political, religious, pay disputes and most commonly, fear of entering a combat

²⁷ Military Sealift Command, "MSC OIF1 Monograph," (unpublished Working Draft, Lessons Learned from Operation Iraqi Freedom, 2004), 31.

²⁸ Ibid., 45.

²⁹ Ibid., 34.

zone, crews on at least 13 foreign flagged ships hesitated or refused to enter the area of operations."³⁰ It is interesting to note that the reason that was most often cited by foreign flagged ship masters balked at entering the combat zone was that they perceived that it was unsafe for their ships to proceed through the combat zone. During Operation Desert Shield/ Desert Storm, the ships did eventually enter the war zone once it was proven to the masters of the foreign flagged ships that it would be safe for their ships to proceed. During OIF there were no foreign flag balkers, the Combatant Commander mitigated the risks by providing escorts through various choke points and this reduced the risks of attack on the ships.

From the lessons learned it is interesting to note that the US Navy did not utilize or mobilize en masse, the services of what was once known as the Naval Control of Shipping Organization (NCSO) and what is now known as Naval Coordination and Guidance to Shipping (NCAGS). These units provide assistance to the Combatant Commanders in performing the embarked escort mission/function through various choke points for both U.S. and foreign flagged ships. The Naval Officers that perform this function in the Navy are all in the reserve community. The NCSO Units were at one time tasked with, organizing, directing, protecting and manning merchant ship convoys through shipping risk areas while, coordinating the escort assets (escort ships and planes) for ship and convoy force protection. In the war time scenario, the NCSO/ NCAGS protection function was to be performed for all ships merchant ships (U.S. and foreign flagged ships) transiting through a shipping risk area provided that the ship was either allied or neutral to the security interests of the United States

³⁰ Cora J Holt, and James K Mathews, <u>So Many, So Much, So Far, So Fast: United States Transportation Command and Strategic Deployment for Operation Desert Shield/Desert Storm</u>, (Washington, DC: Joint History Office, Office of the Chairman of the Joint Chiefs of Staff and Research Center, United States Transportation Command, 1996), 136.

and its coalition partners. It appears from the Operation Iraqi Freedom lessons learned that the ships and aircraft that performed this function did a remarkable job and there were no incidents where the ships were attacked or delayed.

It is evident that a great deal of thoughtful preparations went into war gaming the possible threats and employing innovative and thoughtful ways to mitigate the various risks especially on the issue of using foreign flag ships to provide sealift to the Combatant Commander during Operation Iraqi Freedom.

RECOMMENDATIONS: A LIFT FOR THE AMERICAN FLAG?

Other than operational risk management, pre-positioning supplies and equipment in the theater, other ways to minimize the risk of foreign flagged ships as a source of surge Sealift for the Combatant Commander are to minimize the military use of foreign flagged ships.

The first way is to build enough Sealift capacity so that foreign flagged merchant ships are not required to be utilized. New ships would have to be built in a U.S. shipyard where the costs of constructing a ship are double and maybe even triple what the going rate for the same sized ship on the world market. The only attempts at increasing the sealift capacity of the U.S. in recent memory has been the conversions of foreign flagged RO/ROs to add to the MARAD RRF and the construction and conversion of the Large Medium Speed Roll On/ Roll Off ships (LMSRS). Some of the LMSRS were converted from existing container ships while others were new-builds. Costs for the LMSRS were in the \$228 to \$265 million dollar range per ship back in 1993, when the contracts were awarded to build

the 19 ship class.³¹ The likelihood to close the gap of approximately 1.5 million square feet of sealift capacity that was filled by the foreign flagged ships in the sealift for OIF is not likely to be replaced by a new ship building program with new ship prices in those ranges.³²

If building of new ships, is too expensive, than the next best thing is the conversion of existing ships. This was done after Desert Storm with addition of RO/RO capacity for the Maritime Administrations RRF fleet back in the mid 1990s. The costs of the ships and the conversions are orders of magnitude smaller than \$260+ million per ship for an LMSR. Figures for the conversion costs to purchase, convert and re-flag of ships should be on the order of 10-30% of the costs of a new-build ship. 12 foreign flagged RO/RO ships were re-flagged and added to the RRF fleet for a cost of approximately \$363.6 million.³³ Careful considerations of the ages of the ships, types of ships as well as the propulsion types should be investigated as well as a detailed survey of the ships structure and machinery to ascertain its viability as a candidate. However, like any used car, used ships can have the same types of hidden problems that used car owners don't find out about until after the vehicle is driven home from the used car lot and the warrantee has expired. The engines are worn out or there are structural or mechanical problems that may be very costly or impossible to repair.

The third option is to give U.S. Shipping companies tax incentives to procure, and reflag and operate used ships from the world market under the U.S. Flag. It may not be the

³¹ "TAKR-300 USNS Bob Hope" <u>Global Security</u>. <u>Org Website</u> 25 June 2004 http://www.globalsecurity.org/military/systems/ship/takr-300.htm. [2/13/2005].

³² Beverly McClinton, <<u>beverly.mcclinton@navy.mil</u>> "RE: sealift in support of OIF I, OIF II and OIF II.5 OIF SEALIFT, Spreadsheet Oct 1 2002 to May 1 2003" [E-mail to Greg Thornton <greg.thornton@nwc.navy.mil>]1/18/05.

³³ United States General Accounting Office, January 7, 1994 letter to "A. J. Herberger Administrator U.S. Maritime Administration, Ship Acquisitions for the RRF" <u>United States General Accounting Office website</u>, 7 January 1994 http://l61.203.16.4/t2pbat4/150586.pdf [2/13/2005].

boon to the U.S. shipbuilding industry but it would provide some added benefits without the great outlays of hundreds of millions of dollars that new buildings would require. This would be beneficial in that the pool of available ships would increase along with the pool of available US merchant mariners to man the ships. An additional benefit of increasing the size of the American fleet would go along way toward reversing the trend of mariners leaving the declining US flag fleet. There are very few young people entering the business while many older mariners are retiring as the numbers of US flag seagoing jobs has been on a steady decline ever since the end of the Viet Nam war.

The new Maritime Security Program established in 2003 valued at \$156 million dollars per year increased the number of ships to 47 to 60. The initial MSP program was started in 1996 with a group of 47 ships and a budget of \$100 million dollars. Five foreign flagged Roll on Roll off ships were added to the program in January of 2005 and they will be operated by American companies and be re-flagged to the U.S. ³⁴ The relatively small size of the actual investments made by the US government in relation to the costs of building operating and maintaining commercial ships under the American flag provides some help to the commercial industry. It may not be nearly enough to aid the US flag companies to compete with the foreign flagged companies in economic competition for the market share and commerce the lifeblood of the merchant marine.

It remains to be seen if any of the above programs are viable ways to increase the amount of American flag sealift available to the operational commander and, minimize the use of foreign flagged ships and the risks they pose to the deployment of the force.

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³⁴ "MarAd releases new MSP participants, New Maritime Security Program makes available 60 U.S. flag ships for Defense Department use." <u>American Shipper</u>, February, 2005.

CONCLUSION

Foreign flagged ships will be required to be used in a time of crisis to move the Combatant Commanders war-fighting equipment and sustainment supplies to the theater. That was true for Operation Desert Shield and Desert Storm as well as Operation Iraqi Freedom. Due to the decline of the number of available American flagged merchant ships, the potential exists for even greater reliance on foreign flag ships to meet the Combatant Commanders deployment needs. It is incumbent upon the logisticians, US TRANSCOM and the Combatant Commanders J-4, to plan for possible delays in getting the equipment to the theater. If the ship is foreign flagged, it may succumb to delays and disruption caused by a myriad of things from attacks by an adversary to the failure of the crew to sail the ship into the AOR out of fear of entering a war zone or for political reasons. The Combatant Commander will need to employ strategies to minimize the risks of critical cargo on foreign flagged ships not arriving on time. This could have a direct impact on his ability to generate combat power to accomplish his mission. To completely eliminate the risks of using foreign flagged ships the DOD has the option of building and or converting ships that can account for any shortfalls the total square footage available for the required movement of forces. However, the price tag for buying, building or converting more ships may be greater than the Department of Defense (DOD) can afford. Current sealift requirements are based on deploying military equipment and supplies to fight two near simultaneous regional contingencies. Operation Iraqi Freedom and Operation Desert Shield/ Desert Storm proved that foreign flagged shipping was required to be used for just one MRC. Given the future requirements will likely rely on foreign flagged shipping TRANSCOM and the Combatant

Commander will have mitigate those risks addressed in this paper of cargo not arriving on time. This paper also addressed feasible and acceptable ways of mitigating risks so that the Combatant Commander can deploy his forces and ultimately project combat power so that he can achieve his operational objective.

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